March 25, 2014

WOMEN'S HISTORY MONTH: Team lead's work keeps naval aviators on the safe side

Susan Whitley is leading the team developing Military Flight Operations Quality Assurance (MFOQA), a software application that can analyze aircraft data to identify predictive maintenance indicators and unsafe pilot trends, allowing aviators to make proactive and fact-based decisions to correct them before they lead to an aircraft mishap or costly maintenance failure. "We want to "break the link" before an aircraft mishap or maintenance failure occurs," Whitley says. (U.S. Navy photo)

NAVAL AIR SYSTEMS COMMAND, PATUXENT RIVER, Md. — Calling Susan Whitley a lifesaver is more than hyperbole.

For Whitley, saving lives and turning around near-terminal acquisition programs is part of the job.

As the integrated product team lead for the Military Flight Operations Quality Assurance (MFOQA) system, a software application that provides analysis and visualization of flight data, Whitley is responsible for the overall design, development and execution of the program designed to identify potential human error and other factors before they lead to aircraft mishaps.

In 2011, Whitley led the initiative to create a new baseline for the challenged MFOQA program when its growth was imposing unacceptable life-cycle costs. She embraced a new methodology for the software development and got "buy-in" from all stakeholders in

the naval aviation community. Now back on track, MFOQA is scheduled for Milestone C approval this spring, which will pave the way for limited production and installation of the software on naval computers.

Assistant Commander for Acquisition Keith Sanders, who oversees the Air Combat Electronics Program Office (PMA-209) where Whitley is assigned, called her performance the "most impressive program turnaround that I have ever seen in my career. She resurrected a program that was behind schedule, over cost and headed for termination. The Navy will save millions of dollars that would have been lost if the program had been canceled."

Whitley was recently honored with a Copernicus Award for her leadership on the MFOQA program. She will be recognized at a ceremony May 7 in Chantilly, Va. Managed by the Armed Forces Communications and Electronics Association (AFCEA) and the U.S. Naval Institute, the award honors individual contributions to naval warfare in the disciplines of command, control, communications, computers and intelligence (C4I), information systems and information warfare.

Whitley said she is passionate about "breaking the link" before a naval aircraft mishap or maintenance failure occurs.

"I spent nine years on the Ground Proximity Warning System/Terrain Awareness Warning System team in PMA-209, providing a product that was proven to save lives. I know MFOQA is going to make as big a difference as GPWS did. I like a challenge, and MFOQA has provided that in spades. When I took over the program in 2009, the fleet stakeholders were very unhappy with the product that was being developed. It was not meeting their needs, and I led the team through the challenge of two re-baselines to set the requirements and get the program on a strong foundation."

As for the award, Whitley said it surprised her.

"I certainly did not expect this," she said. "My team submitted me, and it is an honor to be recognized by my team, the AFCEA and the U.S. Naval Institute for my efforts in turning around the MFOQA program. I have read the accomplishments of some of the other winners and am amazed that I am among this group."

SUSAN WHITLEY

POSITION: Program manager, integrated product team lead for Military Flight Operations Quality Assurance (MFOQA) system in the Air Combat Electronics Program Office (PMA-209).

EDUCATION: Bachelor of Science degree in aerospace and ocean engineering from

WOMEN'S HISTORY MONTH: Team lead's work keeps naval aviators on the safe side

Virginia Polytechnic Institute and State University; master's in engineering management from Florida Institute of Technology.

WHY MFOQA IS IMPORTANT TO NAVAL AVIATION: "This product is a game-changer. It is going to save lives. Some people refer to it as "big brother" and do not want any part of it, but I believe when they actually start using it, and see the kind of feedback MFOQA can provide they will start to see it more as "Your Big Brother" and not George Orwell's "Big Brother."

ABOUT MFOQA

Initiated in 2005 by the Secretary of Defense to reduce aircraft mishaps, Military Flight Operations Quality Assurance (MFOQA) is a software application that provides analysis and visualization of flight data. MFOQA is designed to identify potential human error and other causal factors before they lead to aircraft mishaps. The tool identifies predictive indicators and trends by analyzing existing flight data on a regular basis, not just after a mishap or incident. It provides timely, tangible information on aircrew and aircraft system performance after flight and puts that information into the hands of the people who can most directly make a difference — squadron aircrew, maintainers and leadership.

MFOQA will affect four areas of naval aviation:

Maintenance: Augments existing platform maintenance systems; provides maintainers a tool for troubleshooting, especially gripes that are hard to duplicate or require visualization of flight data.

Operations: Presents a dynamic simulation of aircraft data to include single and multi-ship visualization with 3-D animation, event detection, trend analysis, reporting, etc.

Safety: Aircrew debrief, flight safety, data trending

Training: Reporting, policy monitoring and performance trending.